Remarks/Arguments

This paper responds to the United States Patent & Trademark Office action mailed 29 October 2008 (the "Action"), in which the Examiner required restriction of examination for pending claims 18–55.

This paper amends claim 19 to distinctly claim the subject matter Applicant regards as the invention. This paper also amends claim 41 to be in independent form so as to distinctly claim the subject matter Applicant regards as the invention. No new matter is added.

This paper withdraws claims 18, 31–34, 50, 54, and 55 from consideration.

Election of Invention; Traverse of Claim Grouping

Applicant elects for examination the Examiner's invention group II, which the Examiner has generally considered to be associated with a "rigidizing linkage mechanism". See the Action, para. 2. Applicant respectfully traverses the Examiner's assertion that this group II consists of claims 19–30 and 50–53. Instead, (i) Applicant concurs with the Examiner that claims 19–30 and 51–53 are properly within this group, (ii) respectfully asserts that claim 50 is improperly placed in this group, and (iii) respectfully asserts that claims 35–49 should be added to this group. Consequently, Applicant argues that the group II "rigidizing mechanism" claims (i.e., claims that recite mechanisms used to "rigidize") should include claims 19–30, 35–49, and 51–53.

First, Applicant respectfully asserts that claim 50 is drawn to a "linkage structure" and not a "rigidizing mechanism". There is nothing in claim 50 that recites "rigidizing" or a like limitation, and so this claim is improperly placed in group II.

Second, independent claim 35 recites "stiffening material" between inner and outer tubes, and that the stiffening material changes viscosity when energized. It is inherent in this structure that its rigidity will change as the stiffening material's viscosity changes, and so claims 35–39 are drawn to a "rigidizing mechanism".

Third, claim 40 recites an element that is "normally rigid" and that "becomes flexible" when heated. Therefore, this claim is drawn to a "rigidizing mechanism" because the element returns to its "normally rigid" state when not heated.

Fourth, claim 41, now recast in independent form, recited before and still recites "wirewound coils potted in a low temperature flowing material" and that the material "prevents the coils from moving substantially with respect to one another" below a "transition temperature". Therefore, claim 41 is drawn to a "rigidizing mechanism".

Fifth, independent claim 42 recites "a substantially stiff material that relaxes upon vibration". It is inherent that this material returns to its "substantially stiff" state when the vibration ceases. Therefore, claims 42–44 are drawn to a "rigidizing mechanism".

Sixth, independent claim 45 recites "compression-stiffening particles". Since these particles stiffen when compressed, claims 45–47 are drawn to a "rigidizing mechanism".

Seventh, claim 48 recites that "in a first state ... [a] cover is suffiently taut to keep ... links from substantially moving relative to one another". Therefore, claim 48 is drawn to a "rigidizing mechanism".

Eighth, claim 49 recites that a "cover receives a vacuum from ... [a] vacuum source that is sufficient to keep ... links from substantially moving relative to one another". Therefore, claim 49 is drawn to a rigidizing mechanism.

Based on the above arguments, Applicant withdraws claims 18, 31–34, 50, 54, and 55 from consideration, reserving the right to reintroduce these claims in this or another application.

Election of Species; Traverse of Non-generic Claim Assertion

Applicant provisionally elects for examination, with traverse, the Examiner's species QQ. Applicant has identified claims that correspond to the Examiner's species QQ in the table below.

Applicant respectfully traverses the Examiner's assertion that "Currently, no claims are generic." See the Action, para. 11. In Table I below, Applicant has identified claims that generally correspond to embodiments shown in the drawing figures. This identification includes the claims encompassing the elected species QQ:

***** Table I follows *****

Table I

Examiner's Species (Application Figure)	Examiner's Invention Group	Applicant's Invention Group	Claims
A (1, 2A-2C)			-
B (3)	I	I	18
AA (4A)	II	II	19, 20
BB (4B)	II	II	21, 22, 23, 24, 25, 26, 27, 28, 29, 30
CC (5)			-
DD (6)	II	II	51, 52
EE (7)	II	II	53
FF (8)			-
GG (9)			-
HH (10)	I	I	18
II (11)			-
JJ (13A-13C)			-
KK (14A-14C)	I	I, II	31, 32, 33, 34, 54, 55
LL (15)	I	I	35, 36, 37, 38, 39
MM (16)	I	II	40
NN (17A-17B)	I	II	45, 46, 47
OO (18)	I	II	48, 49
PP (19A-19B)	I	II	42, 43, 44
QQ (20A-20B)	II	II	21, 22, 23, 24, 26, 27, 28, 29, 30
RR (21)	II	I	50
SS (22)			-
TT (23)	I	II	41
AAA (12A)			-
BBB (12B)			-
CCC (12C-12F)			-
DDD (12G-12H)			-
EEE (24)			-

But as shown in Table I above, Applicant believes that several claims read on more than one drawing figure embodiment. With specific reference to invention group II, Applicant argues that independent claims 21 and 26 are generic to at least the embodiments shown in drawing Figures 4B, 20A, and 2B (species BB and QQ). The following Table II illustrates how elements from

claim 21 may be mapped against the species embodiments illustrated by Figures 4B, 20A, and 20B:

Table II

Claim 21	Figure 4B	Figures 20A & 20B
21. A rigidizing mechanism comprising:	A rigidizing mechanism is generally shown.	A rigidizing mechanism is generally shown.
a first link, wherein the first link comprises a convex surface;	Three links are shown; the links have convex surface 23.	A first link 221 has a convex surface 225.
a second link, wherein the second link comprises a concave surface that receives the convex surface of the first link; and	Three links are shown; the links have concave surface 22 that receive convex surfaces 23.	A second link 222 has a concave surface 224 that receives convex surface 225.
an active material component positioned between the convex surface of the first link and the concave surface of the second link;	Active material component 25 is shown between surfaces 22 and 23.	Active material components 223 are shown between surfaces 224 and 225.
wherein in a first state the active material component interferes between the convex and concave surfaces with a force sufficient to prevent the first and second links from moving relative to one another, and in a second state the active material component does not significantly interfere between the convex and concave surfaces.	In a first state, component 25 interferes between surfaces 22 and 23, and in a second state component 25 does not interfere between surfaces 22 and 23.	In a first state, components 223 interfere between surfaces 224 and 225, and in a second state component 223 does not interfere between surfaces 224 and 225.

Independent claim 26 recites elements that are similar to the claim 21 elements that read on Figures 4B, 20A, and 20B. Therefore, Applicant respectfully requests the Examiner reconsider and determine that independent claims 21 and 26 are generic to at least two species embodiments illustrated in Applicant's drawing figures.

No Admission

Applicant has argued above that the Examiner incorrectly grouped claims and asserted that there are no generic claims in this application. Applicant has further identified various claims that, generally and clearly, read on the various drawing figures that the Examiner has used to define species embodiments.

Applicant states, however, that even though the Examiner has defined specific species with reference to specific drawing figures, and even though Applicant has elected species based on the Examiner's definitions, Applicant does not admit to such claims being limited to the embodiments shown in the associated drawings. Further, even though in Table I above Applicant has associated various claims with the Examiner's defined species, Applicant does not admit that the so-associated claims are limited to only the particular drawing figure. In some instances, plausible arguments may be made to associate certain claims with one or more species embodiments other than as set forth above. Therefore, Table I above is made to expedite prosecution of the claims. Applicant reserves the right to argue at a later time that one or more claims are illustrated by one or more species embodiments different from those identified in Table I above.

Telephone Communication

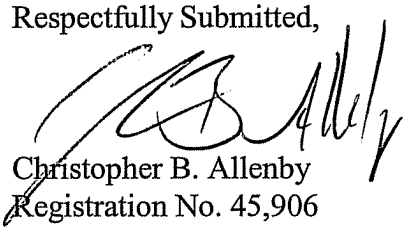
If the Examiner has any questions or wishes to discuss any matter in an effort to expedite prosecution, Applicant invites the Examiner to telephone the undersigned attorney at (408) 523-2460.

Conclusion

Applicant requests the amendments and remarks in this paper be entered and considered prior to examination.

Applicant believes that there are no fees associated with this paper. If fees are due for this paper, however, any required fees or overpayments are authorized to be deducted or credited to Deposit Account No. 503404.

Respectfully Submitted,



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